

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Gary Surrency <gsurrenc@ix.netcom.com>
Subject: [98] 30m Antennas, Thanks
Message-ID: <323F85C8.53CC@ix.netcom.com>

Thanks to all who answered my post about 30m antennas. I have several ideas now for a better antenna as a result of suggestions from this group! Look for a stronger signal soon from my QTH. Thanks everyone.

Thanks especially to LB who pointed out some good issues.

Antennas are still my favorite part of ham radio. Just wish I had more real estate to experiment on (above?).

vy 73 to all,
--

Gary, AB7MY QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: David.Reid@asml.nl (David Reid)
Subject: [118] address of BDX homepages - sorry!
Message-ID: <199609181422.QAA08563@wspub002.asml.nl>

Sorry guys... forgot I was not at home and there is no auto tag-line at my works QTH.

www address for BDX info is:

<http://ourworld.compuserve.com/homepages/drcp/homepage.htm>

oops!!

72/73 es enjoy.
Dave
PA/G0BZF

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: David.Reid@asml.nl (David Reid)
Subject: [102] anyone going to Weinheim, Germany this weekend?
Message-ID: <199609180657.IAA08207@wspub002.asml.nl>

Hiya guys,

I'm planning to make the trip from Holland (Eindhoven) this weekend for the VHF Convention in Weinheim, Germany. (30Kms North of Heidelberg).

more info is available from the german organisers on +49 6207 3311 during DL office hours (GMT+2hrs...)

Hope to see you there

Dave

PA/G0BZF

Life... is a jar of basil.

QRPers do it low down in the noise.

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: Vic Simpson <vsimpson@boco.demon.co.uk>

Subject: [95] Call for moderation? - Hah!

Message-ID: <k8E8oEApAlPyEwfy@boco.demon.co.uk>

Folks,

For me, checking into the QRP-L is like walking into the world's best club. Sparky, quirky, funny, profound, talented..... the list goes on some. If someone is tired of QRP-L, they're tired of life.

Moderation in all things, yes.

A moderator for this list, NO!!!!

-And no apologies for shouting: I'd shout that "NO!" from the rooftops.

73 de G0BVZ, Vic

RSGB G-QRP AGCW ARCI(When I remember to renew!) SCAG DIG QRP-L #666

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: earwax@indy.net

Subject: [131] CWFISTS

Message-ID: <199609181951.0AA00369@IndyNet.indy.net>

The CWFISTS home page is at: <http://n9nvv.qrp.com/~fists/>

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "Arjen Raateland, SYKE/YV, puh. 90-4030 0457" <Arjen.Raateland@vyh.fi>
Subject: [116] data for RCA 4013 transistor?
Message-ID: <01I9MPBS0WJS8Y5UHP@vyh21.vyh.fi>

Hi,

Would anybody have data on the RCA 4013 transistor? Dan's Small parts etc. tells me it's a replacement for the 2N3553. I've got a bunch of these 4013's now, but perhaps somebody knows how close/good a replacement it actually is?

I've been playing with my Sierra (2N3553 PA) and I've probably been overdriving the PA on 15 m at times so that it got quite hot. Like 450 mA or so for the whole rig and 2,5 w out. It may be in order to at least think about what to do when the worst happens ;-) It still works though.

I have no spectrum analyser, but instead I have an ATU of the Johnson type i.e. with a parallel resonant circuit and balanced output. The SWR meter should give me some idea of the spectral output of the PA as the tuner will match on only one frequency, not on harmonics and spurs.

Whatever I do to the PA, I should be able to match the output with zero reflected power through the Johnson-type tuner, lest there is something awry in the PA like self-oscillation.

Right?

(1 mw is 30 dB below 1000 mw and the OHR WM-1 shows milliwatts.)

thanks,
Arjen, OH2ZAZ

Arjen Raateland
Suomen Ymp ristö keskus / YV

Finnish Environment Institute, Helsinki, Finland
SAS Support
EMAIL: Arjen.Raateland@vyh.fi
tel. +358 0 4030 0457
fax +358 0 4030 0490
.-.-.-

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Luke Enriquez <ecsc1fe@lux.latrobe.edu.au>
Subject: [104] Data needed on the 2SC1945
Message-ID: <9609181043.AA18070@lux.latrobe.edu.au>

Howdy,

I'm in the process of simulating a HF power amp, .5 W to 10W.
I need some data on the 2sc1945, particularly the Ft or junction
capacitances.

Regards,
Luke

--

Luke Enriquez VK3DLE "I only cook with Non-violent
3rd Year Electronic Engineering fruit that pulps itself."
Latrobe University, Victoria, Australia.
ecsc1fe@lux.latrobe.edu.au

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From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Bob Marsh <bmarsh@hicom.net>
Subject: [132] Dipole Wire Diameter
Message-ID: <32405586.6D9D@hicom.net>

Hi All,

Just a bit of loose change regarding wire diameter. I'm not an engineer
or anything, but I recall reading that while you can use small diameter
wire, a larger diameter will give you greater bandwidth (i.e. less
tuning).

I always try to use at least a 14ga wire for dipoles, especially when
it's being used as a multibander. Haven't done a comparison, but it
does seem to work well.

There was also an article I saw in the recent past that had a dipole
using multiple conductors on each leg. They were held in place by a
round spacer to simulate a single wire diameter of around 6" or so. Has
anyone tried one of these, and what were the results?

BTW, I'm looking for plans for tube based QRP rigs. This'll let me work

BOTH my obsessions - QRP & Boatanchors - at the same time. Got any good ones?

72 de Bob/KB2SGM

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Dave Fifield <fifield@lan.nsc.com>
Subject: [129] FS Fairness?
Message-ID: <324049E1.481F@lan.nsc.com>

Like many other QRP-L digest users (forced to use this mode due to work constraints), I have not been able to get in on the sale of a single goody offered on the list! - I wanted the Norcal 40, the Argo 505 etc. too guys! The guys who don't use digest mode (lucky fellows) always get in there first.

I'd like to suggest to sellers that they might consider putting all the names of people who reply offering the full asking price into a hat 1 day after their posting and pick a "lucky winner". I will do this myself, having been on the receiving end of the "unfairness" for so long.

Give us digest users a break!

--

Dave Fifield, KQ6FR

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: william.redfearn.cmwdrr01@nt.com
Subject: [149] FS: MFJ 2420 SSB/CW 20M rig
Message-ID: <"15483 Wed Sep 18 21:17:29 1996"@nt.com>

For Sale:

MFJ 2420 SSB rig with
415 CW adaptor.
In great shape, everything works fine.
includes RS mike, manual and box.

For a local pick up I will include a 20 Meter Dipole
with coax.
Asking \$200.00 + shipping in the lower 48.

Palomar Noise Bridge
works fine, paint flaked off in a couple of places.

with box and manual.
\$25.00 + shipping.

73 - Dave.

=====
Dave Redfearn, Sr RF Systems Engineer NORTEL RTP, NC.
ph.(919) 992-3925 email: william.redfearn.cmwdr01@nt.com
qrl? de N4ELM/qrp

All opinions are my own, no one else wants them.

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: wylde@nccn.net (Grover Cleveland WT6P)
Subject: [151] George Dobbs e-mail address?
Message-ID: <v02130500ae666b238285@[205.139.74.180]>

Please.

- - -
P. Grover Cleveland WT6P / QRP-ARCI 3795 / ARS 101 / Norcal 216 / QRP-L #669
Sr. Engineer - Tektronix/Grass Valley
Archaeominiferroequinologist
Fairmont Speeder Pilot
Certified Steam Locomotive Driver
Certifiably Loony

Can also be found at: cleveland@usa.net
71213.2741@compuserve.com
<http://ourworld.compuserve.com/homepages/gcleveland/me.htm>

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Luke Enriquez <ecsclfe@lux.latrobe.edu.au>
Subject: [103] HELP : Where can I buy a Norcal 40a and How much!?
Message-ID: <9609181042.AA17941@lux.latrobe.edu.au>

Howdy,

I've been desperate for a QRP rig for some time now and it looks like the Norcal 40a fits the bill. The question is, how much am I up for? I like the low battery consumption on receive. Its size appeals too, since I'm a backpacker, and any weight can be a hassle.

Regards,
Luke

--

Luke Enriquez VK3DLE "I only cook with Non-violent
3rd Year Electronic Engineering fruit that pulps itself."
Latrobe University, Victoria, Australia.
ecscclfe@lux.latrobe.edu.au

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From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Roy Boggs <rboggs@pcc-uky.campus.mci.net>
Subject: [112] Help: Great Circle Distance Calc.
Message-ID: <2.2.32.19960918131302.0070682c@pcc-uky.campus.mci.net>

I need some help with Lat/Long numbers for a distance calc. After a recent QSO with VE3MIQ/P (my power 65 mw on 40-9'er es 9v batt), he emailed me to say he had never done QRP before, and certainly not milliwatts, and was curious what the MPW might be. He provided GPS data as follows:

N42.50.932 W79.44.749

I looked mine up on the Hamcall web:

37.635905N -82.76104E

I don't know beans about how to translate from one format to another. Notice his has decimals in it. Can someone help me with this? Can anyone simplify this for future calcs?

Turns out that another milliwatt QSO(same pwr&rig) with KD3AO has peaked his interest. Guess I had better bone up on how to do this. Where do u guys get the numbers from? I tried the Listserv, BD.exe, & www.indo.com. Different formats just confused me. If this is old hat, just thank me for the distraction! Email direct unless u are certain that this group would benefit (this policy forever, please).

MILLIWATT ADVENTURE: You all should have heard K3TKS, MachineGunKelly Gingell, with 20mw (yes!) blasting into Kentucky with a 229 sig Sunday night on 3.710mHz on the KL net at 24 WPM!!!!!! Brings tears to a grown man's eyes. Inspiration.

72, Roy Boggs KE4KDT (1) Does your posting truly benefit this entire group? Prestonsburg, KY (2) Are you certain? Read it again to be

sure.

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "John A. Evans - N3Q00" <jaevans@cos.cst.titan.com>
Subject: [130] Missing for sale items !!
Message-ID: <199609181824.0AA39847@nss2.CC.Lehigh.EDU>

Greetings,

For those on digest who miss these quick deals on the list, I have another suggestion. Let's put a list of WTBs on the QRP-L web page.

This way, folks who want something or think they want something can post their desires on the web page. Sellers can then peruse the list of WTBs and limit the bandwidth used on the list at the same time by giving WTB posts first dibs !!

72, n3qoo

John A. Evans Chief System Administrator
Office: (719) 528-1800 x164 Titan Client/Server Technologies
Fax: (719) 528-1275 1115 Elkton Dr, Suite 200
email: jaevans@cos.cst.titan.com Colorado Springs, CO 80907-3535

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: QLF%mimi@magic.itg.ti.com
Subject: [110] MODERATION
Message-ID: <9609181304.AA21560@itg.ti.com>

From: Brad Bradfield QLF

Subj: MODERATION

> -----
> From: adams@chuck.dallas.sgi.com (chuck adams)
> Subject: [38] Moderation

> Gang,

> The topic, IMHO, is a mute one.

Amen! Thanks, Chuck. I fear that the spontaneity of this list would be lost with a moderated format. Even when we diverge, the discussions here are a welcome respite in my day.

72's es 73's,

Brad, WB0CGH

Brad Bradfield, PE	Electrical Design Engineer
(H) 817-321-2960	Texas Instruments, Inc.
(W) 214-462-6230	

Real men talk with their fingers!

QLF@MSG.TI.COM

WB0CGH@W05H.#DFW.TX.USA.NA

ARRL Life Member QRP-L #377 SMIRK #4906 IEEE(M) ARS #72

Collector of wireless and landline Morse keys and accessories.

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: meh@cbsms1.cb.lucent.com
Subject: [114] New Antenna
Message-ID: <199609181430.KAA11589@attrh1.attrh.att.com>

Hello All

Last night I was able to put together a new antenna at the home qth to try. I finished, almost, I need to reroute the feed line into the basement tonight.

Here is what I put together. I have several little egg ceramic insulators, so I used one of them for the center support. I choose to make my antenna as a simple inverted V with 450 Ohm feed line. The interesting part is that the center is up about 57 feet. In putting the rope in the tree I measured the length of the string I used to pull the rope over the limb and divided by two, from the ground I came up with 57 feet. Now I think I could get it higher but I don't have any more feed line and I think I will just reach the tuner as it is. Another interesting point is I used a Autek RF1 to find the tuning point on the tuner. This is a borrowed unit but I am impressed and will probably order one for myself. But anyway taking the tuning information notes and presetting the tuner, then checking the swr using the transmitter showed match. I will spend the next several weeks checking this antenna out. So far I am happy but I do need to get the tuner closer to the operating bench. With the way the feed line is run currently the tuner is across the room.

Another nice thing about the Autek was that I was able to tune the antenna without putting qrm on the air yes, but also not have to clugge (sp) up a wire to key the transmitter from across the room and use the telescope to see the swr meter. Like I said I am impressed. I have used the MFJ unit and wasn't nearly as impressed, granted the MFJ unit I used was the smaller cheaper unit.

Just some notes on the antenna, I thought I would share, I think I forgot to tell you how long the legs of the V are. I had two chunks of wire, or is that hanks in Texas talk. Anyway the shorter one was 83 feet long, so I made the other leg the same length. With 83 feet and the center of the V near the center of the lot crosss wise the legs just fit in my lot, well nearly fit anyway. One side is right on the line. I may try to move the ends out and up some to increase the angle. Wow is that a lot of wire. I kinda wish I had some software to model this antenna, I think I will check with members of the club to see if someone has something I can use here.

Good antenna waves to you all.

Marty kd8bj

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: n3wxi@sgi.net
Subject: [150] nn1g rig questions
Message-ID: <199609190239.WAA26703@orion.bv.sgi.net>

Hi folks. I am thinking of building the NN1G rig from the 1995 handbook and I have some questions. I hope these questions aren't too dumb or obvious but how else can I learn? I realize that this circuit is used in many available kits, but I hope by scratch building this I can learn more. My main confusion (so far) surrounds the 10.7MHZ IF transformers (T1,T2,T4-T6). The handbook gives a Mouser part number for T4-T6 but just describes T1 and T2 as 10mm 10.7MHZ IF transformers. The description for T4-T6 is also 10mm 10.7MHZ. Are all these parts the same? This doesn't seem likely since a part number is given for some of these parts but not others. Otherwise they would give the same part number, right? If they are different HOW are they different? Also, for T5 and T6 a value (in microhenrys) is given, but in the Mouser catalog no value is specified. I realize that ANY value of inductance can be combined with SOME value of capacitance to give a 10.7MHZ resonant frequency. Are these things that standardized?
Again, this doesn't seem likely, but can someone enlighten me?

Ok, second question. The circuit consisting of T1,T2,and C2-C4 would appear to be a bandpass filter. What is the bandwidth of this filter? I have read the

chapter in the handbook on filters twice but so far my understanding of this chapter is somewhere between slim and none, and slim just left town. I am not looking for an explanation of filter calculations here, just a value. My imagination is working overtime on expansions to this rig but in light of my current confusion I may be WAY over my head here.

BTW, I did study electronics at one time but that was almost 30 years ago and at the time tubes were still king and I have been away from analog electronics since about 1969. Just trying to bolster my ego here, I can't believe this seems so difficult. Maybe I should just buy a kit.

Ok, enough for now. If this is too presumptuous of me you can tell me to buzz off and I will understand and not take offense.

Waiting with dunce cap on head and notebook in hand.

George (N3WXI)
QRP-L #440
NorCal #1711 (I think)

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: duane <duane@flinet.com>
Subject: [127] parts list
Message-ID: <3240368F.547@flinet.com>

hi guys

just want to let you know that I have compiled a list of dealers that sell electronics parts of all kinds. this list can be downloaded from my ham radio page. <http://www.flinet.com/~duane> choose the ham link then go towards the bottom of the page and find vendors list click it and download it. if you have another person you want added to the list email me and I'll add it.
thanks duane AB4BE qrp-l# 710

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: KFGlynn@aol.com
Subject: [120] Phone OK on QRP Afield
Message-ID: <960918114742_525100141@emout09.mail.aol.com>

Hi gang,

FYI wanted to let you know that phone is permissable on QRP Afield this Saturday. Same power limits though. Chet Bowles verified this for me. I'm hoping to lure some local club members down. Their code is a bit rusty.

GL

73 Kevin KB2TE0

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: mvjf@mvubr.att.com
Subject: [109] QRP Afield
Message-ID: <199609181300.JAA01766@alig1.att.att.com>

Dont forget QRP-Afield this weekend.

Mike C. WA8MCQ, Pls send me your e-mail adr.

Thanks

72/73 Jim Fitton, W1FMR NE-QRP <>< NH

E-MAIL - PLEASE USE mvjf@mvubr.lucent.com (not att.com)!

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Norbert.Heyder@erno.de
Subject: [101] QRP+: CW problems with internal keyer
Message-ID: <9609180641.AA04207@mail-s.erno.de>

Hi all,

Thanks very much Paul, Jerry and Larry, who meanwhile gave response upon my question!

Your answers let me conclude that the described problem disappears with the use of Eprom 'Rev 4C' - These are good news!

Also my special thanks to our 'Index Circuit Insider + Investigator' Larry, W1HUE, who did a great job with his very detailed report and suggestions on curing this and similar problems providing info about the principles/ reasons mods and side-effects!

PS: Had a DX-Contact with an East-Siberian stn on the island of Sachalin(North of Japan) on 40m at night with my QRP+/dipole! Always thought that more than 5W are needed for real DX on the lower HF-Bands to break through the QRM - but now disabused! Using my homebrew preselector to cope with intermodulation(BC!)

72 de Norbert, DL8BDF

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: bill@techline.com (Bill Todd)
Subject: [96] Send ur New Call to the NWQ
Message-ID: <199609180515.WAA09409@wishkah.techline.com>

Greetings gang -

I'm putting together the October "NWQ" Newsletter, and I would like to list all of the Club Members who have changed their call in the last 6 months or so, since the various gates have opened.

If you have changed your call recently, and you're a club member, please send your new call, your former call, and your Membership number (if you remember it..hi) to me.

Thanks - Bill-N7MFB

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: wylde@nccn.net (Grover Cleveland WT6P)
Subject: [97] Shunt-fed vertical advice needed
Message-ID: <v02130501ae6507ce7f6b@[205.139.74.204]>

I have several forty foot aluminum irrigation pipes not being used at the moment and I am considering using one as a vertical for thirty meters. This would be grounded and guyed. Due to the need to protect from lightning, I intend to install with the base of the vertical grounded (literally).

Could someone with a modeling program advise as to the proper distance from the ground to the shunt feedpoint and the approximate capacitive value to use, assuming 10.115 MHz and the ever present "perfect" ground?

many thanks,

Grover

Grover's Tiny Little Signature File for Those With Emaciated Mail Readers
WT6P, archaeominiferroequinologist, nerd.

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Stan Goldstein <stan@cruzio.com>
Subject: [128] Sierra power increase /t-2 primary ?
Message-ID: <32403691.17C3@cruzio.com>

I recall reading somewhere that Dave Meacham , w6emd, had suggested increasing the primary windings on t-2 from 8 to 11 turns to get increased inductance on the lower bands.

Has anyone done this ?

What were your results ?

Thanks ,

Stan , N6ULU

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: JCoote@aol.com
Subject: [122] Trap-less verticals
Message-ID: <960918121647_311573754@emout11.mail.aol.com>

Thanks to those of you who commented on my trap verticals post.

Another more expensive idea I may be trying is to use my automatic antenna tuner (Icom AH-2 wire/whip tuner) right at the base of a 20 to 21 foot vertical and radial system.

I've done this in the past with longer masts and mobile whips, but I think the 20 foot length has advantages for low-angle work in the mid and upper HF bands. 20 feet works out to about 5/8 wavelength on 28 MHz. After looking at some textbook patterns for 1/4 through 3/4 wavelength antennas it became apparent that a vertical has the most gain at 5/8 wavelength, dropping as frequency is decreased to where the antenna is 1/2 wavelength and below.

The antenna should be "efficient" from 11 Mhz (1/4 wave) through 28 Mhz

(5/8 wave) and have some gain and low-angle performance on the higher bands... 21, 24, 28 Mhz.

I may mount the 20 foot mast (and base insulator) on the roof, with 10-12 invisible radials on the roof, or I will mount the 20 foot mast and tuner on top of a pole, and use four insulated 20 foot guy wires as radials.

This antenna worked well during a temporary field operation, but I did not have time to really give it the test for DX and low-angle. It did work with a manual tuner at the base from 3-30 Mhz and worked with an auto-tuner at the base in 3-30 Mhz.

Most trap verticals are 20 to 25 feet tall. I also like the idea of loading "all" of the 20 foot whip instead of 1/4 wave sections.

In an early ARRL/QST publication, I saw W4VON's antenna which used a 16 foot vertical and four 16 foot radials. The W4VON antenna was fed with ladderline and a manual tuner in the shack.

Using 5/8 wavelength as the upper frequency limit only means the most gain at low angles. If the vertical was 3/4 wavelength or longer, there would be multiple lobes, possibly at undesirable angles. A 40' to 41' foot antenna for example would be 5/8 wavelength on 14 Mhz.

I'm just a little worried about putting this allegedly "outdoor" tuner outdoors on the roof and might enclose it in a weatherproof box.

73, Jay

WB6AAM

"Anything not compulsory is forbidden"

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: BOB KELLOGG <ae4ic@nr.infi.net>

Subject: [115] Tuner Losses

Message-ID: <199609181447.KAA28234@mh004.infi.net>

Gang, Wake up!! I just did.

I've been doing some experimenting. I don't like the results of my experiments. But, I don't understand them, either. So, here is the method and the results. Will someone please tell me my problem? Does any one else have this problem?

First, I hooked up my transmitter to a tuner then the output of the tuner to my WH-1 wattmeter, then the "load" side of the wattmeter to a 50 ohm dummy load.

Then I measured the power (which would normally be available to the antenna)
Next, I took the tuner out of the circuit (by switching it to bypass) and
measured the power again.

My weak brain (QRP) suggests that this should give me an indication of the
losses in the tuner. In fact, the first figure divided by the second figure
(X 100) should be an index I could call "Tuner Efficiency". (I learned this
in College)

Here is the measured "Efficiency" for 4 bands on 3 tuners:

Tuner/Band	MFJ-949-E	ST. Louis	Air Core S. L.
80M	68	39	31
40M	100	45	18
30M	100	62	43
20M	100	80	55

The third tuner is the St. Louis tuner with an air core inductance instead
of the stock T-80-2 toroid inductance. (42 turns #18 wire, 2-1/2" dia,
tapped) I tried this because of concern that the very small toroid was
causing the losses.

John Andrews is responsible for this. I was happy until I met him.

Has anyone else made this check on their tuner? What were the results? Why
do I have some kind of lossy problem with my St. Louis tuner? HELP!!

CUL,

Bob Kellogg, AE4IC
Probably, but not necessarily. - Benny Hill

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "Frank G3YCC" <g3ycc@enterprise.net>
Subject: [124] Web pages
Message-ID: <199609181703.SAA19632@mail.enterprise.net>

Now I have more web space, thanks to those who advised me to reduce
graphics size and a free megabyte from Geocities, I have put some more
stuff on. See some nice home made keys from JA-land etc.
Please use the web site often, there is LOADS to see!
Cheers.

--

Frank G3YCC
Ham Radio QRP Web Page:

<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: ukii@megsinet.net (ukii)
Subject: [121] Where do I start ?
Message-ID: <01BBA54E.B82846A0@dial105.megsinet.net>

Hello All;

I am getting ready to build my first kit (40-9er) and need some guidance. I have attended DeVry and also have had 4 years in the Navy as a aviation electrician. I can solder, but believe it or not, I was never shown the proper way to construct anything from scratch. I have, in the past, tried to make some circuits and have done some repairs for my kids things. A major point here is how do I start? I mean, the circuit board for example, you must have something to hold it down. I have used visegrips as a stabilizer so I could hit it with the iron and not have it go sliding across the desk. I did go and buy that "third hand" alligator clip vise clamp thingie at R/S, but see a problem with that already. If I hold the board with that, install a component (resistor) I still will need another hand to hold it in while 1 hand is on the iron and the other holding the solder...

I know this seems foolish, but please, any BASIC construction tips would be greatly appreciated... We seem to either have picked up the construction techniques on our own, and my method is poor, to say the most. Kind of strange that schools don't teach the "basic's". Like the thread about checking your meter leads on the OHM scale before testing high voltage, or, "stick the component on the board, bend the leads and solder, then cut off access."

So, as a novice to building, please enlighten me as to proper construction methods. I would like to LEARN the right way, rather than fall back on "my bad habits". Never too late to teach an old dog....

Thank you ALL very much..
I wonder if there is a charge for this qrp-1 school? hihi.

Best 73 de john
N9UKX

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: wayne.barnhart@smug.org (Wayne Barnhart)
Subject: [145] winding torrids

Message-ID: <9609181715196095@smug.org>

My various programs tell me I need to wind 28 turns of #22 wire on a T50-2 core. Try as I might I could only do something like 24 turns. I am pretty sure that I can count that high - had lots o' math in skool so looking somewhere else for the solution and of course here yawl are.

My 49er is complete, I think. Tack mounted the necessary interface connections last night but reluctant to plug the thing in. It might work but then again it might not. If it works ok but...if it don't then theirs trouble shooting, soldering, and all that other stuff that goes with operator failure. On the positive side at least I won't have to reinvent a suitable language to properly express my frustrations, did that when I built the NW8020 and most of it is still applicable. Am I alone here or do the rest of you madly rush about to apply copious amounts of speeding electrons to your newly minted projects as soon as possible?

CMPQwk #1.4 UNREGISTERED EVALUATION COPY

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "Ken Freedman" <n1qqv@cshore.com>
Subject: [142] Wizard Needed!
Message-ID: <199609190047.UAA42207@nss2.CC.Lehigh.EDU>

Hi Gang.

I loaned out my MFJ 948 (theoretically 300 watt) cross needle match box. The Loanee flashed it over, (not real hard to do) bought and installed a new switch and returned the unit to me still not working, and with the calibration pots all wound up. I cleaned up a shorted coil and a blown diode (seen this movie before!) and calibrated the forward power on both scales. That was easy.

Now how the devil do you calibrate the reflected power? Preferably without frying the finals in my QRP rig.

TNX and 73, Ken

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "Ken Freedman" <n1qqv@cshore.com>
Subject: [152] Wizards

Message-ID: <199609190314.XAA60290@nss2.CC.Lehigh.EDU>

Wow!

Instant response to my question about calibrating a reflected power meter. Many thanks to KE9UW, W03B, N3MBY, KA0GKC and Rich Kendrick.

Now the unit is ready to go aboard ship (OK, small sailboat!) for the QRP to the Field weekend. Hope to work some of the QRP-L gang before, during and after the contest. Listen for WY1W and N1QQV. Anyone who works us while we are signing /M, and QSL's, will get a special card in return. We will be on the air during the sail home from Block Island on Sunday unless the WX keeps us too busy handling the boat.

Best to All, Ken

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: n0ihm@starpoinet.net (Wesley R. Jenson)
Subject: [123] WWV URL
Message-ID: <199609181644.LAA21342@info.starpoinet.net>

Wondering if anybody else had tried to connect to the address given in QST, Sept 96 for getting UTC time on the NET?? They gave <
gopher://time_a.timefreq.bldrdoc.gov:13/0 > but, now I cannot connect.
Has there been a change? Kinda neat when WWV is coming in QRN on rig.
Wes N0IHM
qrp-l ARCI

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Raymond Tougas <tru_blu@worf.omn.com>
Subject: [94] [Fwd: Re: sierra + kc-1]
Message-ID: <323FDD02.104C@worf.omn.com>

X-Mozilla-Status: 0001
Message-ID: <323FD899.53EE@worf.omn.com>
From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: bfollett@ditell.com
Subject: [117] Re: 30m, QRP level antennas (LONG)
Message-ID: <199609181513.JAA15978@orion.ditell.com>

Hi Gary:

Always interesting to listen to someone else's solutions to difficult antenna sites....

<<2. Does any company make a 30m only vertical, shortened or full size?>>

Yep, the company made its debut at Dayton this year, and I have their catalog.

R. Myers Communications, LLC,
PO Box 17108
Fountain Hills, AZ 85269

602 837 6492

Email bmyers@primenet.com
www.primenet.com/~bmyers/ For web catalog.

They make the "Gladiator Series Verticals" and I must say, they are great looking! Double wall tubing for the bottom sections, heavy brackets, "Our compression clamps are made from Swedish 304 chrome-nickel stainless steel" , the inductor is silver plated no. 12 ga. teflon coated wire wound on a solid fiberglass rod, etc.

No tricks to these antennas, they make full sized, and shortened in different lengths with the coil section in the middle (center loading) All require radials, but they recommend elevation of only a several feet to get away with 4 sloping radials.

They also recommend, and sell components for, Jerry Sevick's matching transformers.

Specifically, they list a Model GL30MS for 30 meters that is approx. 15.5 feet tall, has a 400kHz bandwidth for 2:1 swr, and the cost is \$200

They also make a 80 meter vertical, shortened to 21'6" with a bandwidth of 250khz at 2:1 or less. and three different sized 40M versions.

The usual disclaimers... But I'll have to say their catalog is refreshingly honest -- Even LB would like it.

Bob Follett WA7FCU, QRP-L # 129, NorCal, ARCI, 10-10, ARS
2861 Estates Dr. VOICE: 801.649.6457
Park City, UT 84060 E-mail: bfollett.ditell.com

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [139] Re: 30m, QRP level antennas (LONG)
Message-ID: <Pine.SOL.3.94.960918193943.29497A-100000@utkux4.utcc.utk.edu>

On Wed, 18 Sep 1996 bfollett@ditell.com wrote:
> The usual disclaimers... But I'll have to say their catalog is
> refreshingly honest -- Even LB would like it.

I liked everything written about the company until I hit the \$200 for a 15.5 tall antenna for one band. Bet I could make one "almost" as good for under \$50, including mast, coil, hardware, chimney mount, and guy wires--and maybe even the coax. Since a quarter wavelength at 30 meters is about 25' long, the 60+% length is right at the break point where efficiency sags more quickly, so the antenna is on the safe side. Probably a gamma match, which would put things at DC ground for static discharge down that ground braid to the 8' ground rod(s). Might hinge the base to permit lowering to keep the coil and connections clean at midpoint. Ought to work fine.

Difference between mine and the \$200 job: need to inspect and clean more often--but I do that anyway.

-73-

LB, W4RNL

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: ori@HEA.COM (Ori Mizrahi-Shalom)
Subject: [119] Re: 40m Hamstick Extender for CW Subband
Message-ID: <199609181540.IAA16160@salmon.heava.com>

I've seen people add a small (about 4") copper piece to the middle of the whip, extending out at 30-45 degrees. This works as a capacity "hat" and you can do that in a few minutes of work (with a clamp) with good results.

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: "Thomas J. Whalen" <whalen@swcp.com>
Subject: [147] Re: Butternut Verticals
Message-ID: <Pine.SUN.3.91.960918201809.8034A-100000@kitsune.swcp.com>

On Tue, 17 Sep 1996, Ron Giuntini wrote:

> Anybody using HF6V Butternut vertical QRP? I have one but have never used
> it. (Got it for 50 dollars). I need the 75 ohm matching section. Also need
> to know the proper length for the 20 meter wire on the side of the thing. I
> could lay out some radials and try it I guess. Probably will eventually.
> Just want to know who is happy with it on QRP. Thanks for your input.

> Ron KB6GK
> NorCal #1718
> San Francisco

Ron, I cant find my hf6v manual, but when I do Ill get you the length of
the 75 ohm line. Also that wire on the side of the vertical is a quarter
wave stub for 15 meters. Will get you the exact lenght of that too. cu
soon Tom WB5QYT> > >

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Jim Lowman <jmlowman@ix.netcom.com>
Subject: [140] Re: Call for Moderation
Message-ID: <199609182353.QAA17905@dfw-ix10.ix.netcom.com>

At 02:54 PM 9/16/96 -0700, you wrote:

>Claton,

>

>You already asked for a vote once. Must you again use up
>bandwidth for the same call?

>

>And what is wrong with my suggestion? Seems to me that it
>everyone what they want.

I heartily second Monte's well-thought motion. Creating a second,
moderated area is the way things are often done with newsgroups.

It worries me that so many are in favor of moderating this list. Why
not leave it to the REAL moderator, the listowner?

I would hate to leave this group, but certainly will do so if this moderation
nonsense goes through. I'm sick of seeing net.cops everywhere I try to read!

72 de Jim - KF6CR

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: DYARNES@aol.com
Subject: [111] Re: CMOS II/III Switches
Message-ID: <960918091226_525019855@emout20.mail.aol.com>

Somebody may have already posted this, but I found that these same switches are now available at Radio Shack and I picked up several for my CMOS III.

The part number at RS is 275-1571. the cost \$2.39 for 2 of them. I also notice in the new catalog a package of four similar looking switches (part # 275-1547) which are 4 for \$2.99. Haven't seen them first hand yet, but they look like they would work FB as well.

72 de David W7AQK

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Greg Weinfurtner <weinfurtner@ouvaxa.cats.ohiou.edu>
Subject: [113] Re: Data needed on the 2SC1945
Message-ID: <v03007800ae65a420a40c@[132.235.72.11]>

>Howdy,
> I'm in the process of simulating a HF power amp, .5 W to 10W.
>I need some data on the 2sc1945, particularly the Ft or junction
>capacitances.
>
>Regards,
>Luke
>
>
>--
> Luke Enriquez VK3DLE "I only cook with Non-violent
> 3rd Year Electronic Engineering fruit that pulps itself."
> Latrobe University, Victoria, Australia.
> ecsclfe@lux.latrobe.edu.au
>--

Hi all,
2SC1945 Data:

*****Max Ratings*****

Power Amp Si. EP Vcbo=80v Vceo=40v

Ic=6A Pc=20watts Tempmax=150'C

Icbo=100ua Vcb=30 hfe=50 Vce=10v

IC=100ma

*****Typical*****

Power out= 16watts at 70% eff.

Power in= .5watt

Freq 27mhz

Vcc=12vdc

73 de

```
*****
*                                     Greg Weinfurtner AEE BSS *
*      NN      N      SSSSSSS      8888888      0000000      Electronic Design Splst *
*      N N      N      S          8      8      0      0      Ohio University   Athens *
*      N N      N      SSSSSSS      8888888      0      0      GO BOBCATS! *
*      N      N N          S      8      8      0      0 *
*      N      NN      SSSSSSS      8888888      0000000 *
*                                     Can thou send forth lightnings *
*                                     Amateur Radio      that they may go and say unto *
*                                     DXCC WAS EM89      thee, 'Here we are'? Job 38:35 *
*      weinfurtner@ouvaxa.cats.ohiou.edu *
*      http://ouvaxa.cats.ohiou.edu/~weinfurtner *
*****
```

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>

Subject: [141] Re: Dipole Wire Diameter

Message-ID: <Pine.SOL.3.94.960918201533.29497E-1000000@utkux4.utcc.utk.edu>

Bob,

Actually, the scheme dates back to the earliest days of radio, and the "cage" antenna. Some folks thought the wires added their fields, which they do, but they forgot that the current divides among them, so claims were in excess of reality.

You can use a simpler scheme to good effect: Use a single spacer for two wires. The net effective diameter is very roughly half the spacing. Using 450-ohm line shorted at each end and at the feedpoint is like using half-inch tubing. Roughly. However, bandwidth increase is inversely proportional to frequency, so at 80 meters, you need a very "fat" wire to achieve the same bandwidth you get at 10 meters with only modestly plump wire.

Some folks find using a single wire and feeding it with parallel feeders and an ATU simpler to maintain than a complex structure of wires and spacers. No significant performance difference for wires of similar length, fat or thin.

-73-

LB, W4RNL

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Richard Mulvey <mulveyr@frontiernet.net>
Subject: [133] Re: FS Fairness?
Message-ID: <199609182006.QAA26446@mail.frontiernet.net>

>
> Like many other QRP-L digest users (forced to use this mode due to work
> constraints), I have not been able to get in on the sale of a single
> goody offered on the list! - I wanted the Norcal 40, the Argo 505 etc.
> too guys! The guys who don't use digest mode (lucky fellows) always get
> in there first.
>
> I'd like to suggest to sellers that they might consider putting all the
> names of people who reply offering the full asking price into a hat 1
> day after their posting and pick a "lucky winner". I will do this
> myself, having been on the receiving end of the "unfairness" for so
> long.
>
> Give us digest users a break!

> --

Well, it's not really a function of whether or not people are subscribed to just the digest. For example, I get the messages individually, but generally can't access them from work, so the point is moot. I suspect most of us have the same problem.

Besides, it's not like QRP-L is the only source of used QRP and other equipment. There are a constant stream of messages on rec.radio.swap and via packet for the same equipment.

I think it would be asking too much of the potential sellers to have to collect all of the names and relevant information, and then wait. If nothing else, think of how many people will have had second thoughts by the time the seller picks a name, thereby forcing the seller to contact a potentially long list of people to find someone who doesn't actually regret making an offer in the first place. ;-)

- Rich

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Allen Jones <ajones@adsnet.com>
Subject: [135] Re: FS Fairness?
Message-ID: <1.5.4.16.19960918165143.2ebf1cb0@206.158.2.1>

I don't think there is any real good answer to the problem. Those who subscribe to the Yellow Sheets have similar complaints about Snail Mail delivery.

72/3 de Allen, K9DZE
ajones@adsnet.com

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: wb2vuo@juno.com (William K Hibbert)
Subject: [99] RE: Hamstick Extensions
Message-ID: <19960917.151142.4799.3.wb2vuo@juno.com>

I would opt for the capacity hat.

Back in 1980/81 I was working at the field site for a new power plant. I got the OK to put my FT-7 in the company truck, and 10 was GREAT, so I

put what was known as a "Single Trucker" CB antenna on the mirror, trimmed for 28.500 MHz. When the project got bogged down, the site manager required that all contractor's have CB radios in their respective vehicles, and check in on Ch-7 with the gatehouse. This was supposed to allow the Prime Contractor to keep track of all of us Subs :)

I couldn't put a second antler on the ruck, and the CB wouldn't load into the re-tuned Single Trucker, so I got a medium battery clip, and soldered a 6" length of # 12 on it, and by trimming the wire down, I could load the antler capacitively down to 27.05 MHz. The 'hat' was clipped to the top of the center loading coil.

Later on, I did this with a Hustler system, and trimmed the resonators for Phone, and clipped my capacity hats on for CW. It worked just fine on 40 & 20 with one hat each, and I made two hats for 80, one for 3.815 and one for 3.550 MHz.

I see no reason that the same method couldn't be used on a Hamstick.

72/73, Keith, WB2VUO, QRP-L #582
Trustee, KB2YTW/B 10Mtr Beacon (28.2860 MHz)
"In the Depths of the Great Bergen Swamp...FN13ac"

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Dan Keen <70731.722@CompuServe.COM>
Subject: [154] Re: Moderation Vote Resu
Message-ID: <960919035328_70731.722_EHM77-2@CompuServe.COM>

> BFD, what is so great about paying extra for something we already have for
> free????
>
> Dave Dabay KD3PC QRP-L #365 Technology Specialist, Radford City Schools

Sir, you are here betting against Bill Gates. Normandy" has been a biggee with MS, albeit not as considerable as "Chicago" or "Cairo".

And betting against the innate laziness of the _common pipples_. The general public for some reason likes bells and whistles. I am serious when I say that the average computer user just doesn't have your good common sense. They will love the Normandy (AOL/Compuserve styled) Internet just like they loved Windows instead of the more sensible MS DOS.

Compuserve was just barely getting started converting all their computers over to NT servers, changing their whole system from ascii to hmi. But when

shown Normandy they immediately pulled over 80% of the workforce which had been on the conversion to hmi project and reassigned them to the task of integrating CIS into Normandy. CIS plans to abandon their old walled off areas. Management is guessing about 2 years before it no longer exists. CIS will be totally net.

If all goes as Bill Gates plans, then CIS, AOL, G, Delph, (buyers) will be rolling out wheel barrels of money for to induce interesting looking groups now on the Internet (sellers) to convert. Part of that conversion will be moderation. The way it is now, CIS has one Wizop per each of their 1000 or so forums and each makes a few grand a year. Sysops get free online time.

Lots of QRP groups might now be unmoderated, but long green is soon going to come begging for them to reconsider (at least in Gates' dreams).

Dan

70731.722@compuserve.com

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: dave dabay <kd3pc@nrv.net>
Subject: [108] Re: Moderation Vote Results
Message-ID: <199609181234.IAA32161@kirk.nrv.net>

At 11:55 PM 9/17/96 EDT, you wrote:

>Thanks to Claton Cadmus for doing the "moderation" survey (I voted yes).

>

>I would like to say that many internet sites previously unmoderated will in
>about a year have moderated areas. And here is why:

>

More micrsooft propaganda deleted

This is kind of like the "big" news a few years back when AOL and compuserve got full internet access and news, all it did was dump several thousand "know it all" types into the real world. And raise the noise level in some otherwise nice groups by about 400%. New users are good, don't get me wrong, but they need to "learn" the etiquette, not trya nd fix what isn't broken. The net, the real one, the usenet has always had a little better behaved clientele who wasn't hell bent on control or power ala "the moderation"....if you don't like it just delete it and go on about your life.

>Look for all the now proprietary services' HAM and QRP areas to move over to
>the net in about a year. Actually about the first CIS community to move over
>to the net will be their ISSUES FORUM (featuring the Rush Limbaugh section).

>But basically the idea is that mainly the process will work in reverse to
>that: CIS, Genie, et. al. expect a bazillion already existing sites to
>simply bring themselves into their proprietary fold.

BFD, what is so great about paying extra for something we already have for
free????

dave

obligatory QRP content, the vfo on my NN1G has been soldered, test tonite,
seal it by the weekend.

Dave Dabay KD3PC QRP-L #365 Technology Specialist, Radford City Schools
Race at the New Elk Creek Dragway 540-731-5011

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Raymond Tougas <tru_blu@worf.omn.com>
Subject: Re: sierra + kc-1

John Spoonhower wrote:

>
> Ray, you never mentioned in your post the condx of the radio. Assuming
> it's in great shape, I'll offer \$250 for the Sierra + band modules +
> kc-1. OK?
> 72, john, kc2du

Hi John,

Thanks for the offer. I received a TON of e-mail (those electrons
can be heavy) and the advice from everyone was to sell my body organs,
but to keep the Sierra as I would regret it later. (Who really
uses all those organs anyway?).

>Radio-Ray ..._ . _

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: "David D. Meacham" <ddm@datatamers.com>
Subject: [134] Re: Sierra power increase /t-2 primary ?
Message-ID: <Pine.LNX.3.91.960918135707.11328A-100000@dt1.datatamers.com>

Stan,

My article is in the March 1995 QRPP, page 54. I did it & those are my results. I used Wayne's 160-meter band module. I believe he has done some more experimenting on T2 turns ratios recently. All my work was done on my NorCal Sierra (club kit).
72, Dave, W6EMD

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [105] Re: TenTec qrp kits
Message-ID: <Pine.SOL.3.94.960918065046.25980A-100000@utkux4.utcc.utk.edu>

On the new Ten-Tec kits, please see my post in the archives in late August. I visited them, discussed the kits, and picked up as many technical specs as a prototype and conversation would allow. They should be under \$100, but include case and knobs. They are finalizing production questions and have set a rough Halloween appearance date, with a slide date of about mid-November. Although they had no samples, they seemed confident of making their stocking-stuffer deadline. By the time the kits appear, they should also have completed the reconstruction of their "showroom."

I believe that it may now be possible to give the QRPer you love a kit for each HF ham band, each by a different producer--well, at least through 20 meters. So pass this note as a hint (with ads attached) to the non-QRPer in your household and hang up a big, sturdy stocking Christmas eve.

-73-

LB, W4RNL

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "Chris J. Cartwright - ELF" <dsc3cjc@imc220.med.navy.mil>
Subject: [106] Re: TenTec qrp kits
Message-ID: <Pine.3.89.9609180747.A1602-0100000@imc220>

On Tue, 17 Sep 1996, Duane Anderson wrote:

> Hi everybody:
> In regard to the new Ten-Tec QRP rigs coming out...I just received a new
 <snip>
> meters...but they don't say when or how much (although they do hint to
> "inexpensive").

In August the sales reps were saying "about \$100", due to ship in November.

-- Christopher Cartwright, Tech. Engineer		...our chief weapons are fear,
-- Voice 301.295.0809 N3XRV QRP-L #655		fear and surprise, and nice
-- Mail dsc3cjc@imc220.med.navy.mil		red uniforms, oh damn!!
-- ccart@erols.com		-- Monty Python

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "Denton Bramwell" <denton@cyber-west.com>
Subject: [138] RE: tuner losses
Message-ID: <01BBA589.060034C0@cyber-west.com>

Most RF wattmeters need to 50 ohms at the output in order to read accurately. If you hook the tuner BEFORE the wattmeter, the meter is looking into heaven-knows-what for an impedance, and the readings are not to be trusted. Next step: CTRL ALT DEL.

The only way I know to check tuner efficiency involves putting the tuner right after the transmitter, terminating it in a known (but non 50 ohm) resistance, adjusting the match for 1:1, and using an oscilloscope across the resistor to measure voltage. Note that anything above QRP is definitely hazardous to the health of 'scope probes.

Denton
K7OWJ

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: kd7s@psnw.com (Bill Jones)
Subject: [146] Re: Where do I start ? (long)
Message-ID: <199609190128.SAA04224@sierra.psnw.com>

John, N9UKX wrote:

>I am getting ready to build my first kit (40-9er) and
>need some guidance. I have attended DeVry and also have had

>4 years in the Navy as a aviation electrician. I can solder, but believe
>it or not, I was never shown the proper way to construct anything
>from scratch.

John, you have come to the right place. The cumulative building experience
on this list would no doubt total thousands of years. I'll offer a few
hints of my own.

Before you do anything else, check your PC board for any problems such as
broken traces or bridges. If it appears okay, clean it very well before you
begin soldering. Any oxidation can result in a poor connection that can be
difficult to detect later. Inventory all the parts ahead of time and make
sure you have identified each component correctly. Next, make a copy of
your schematic. As you install a component, mark it on the schematic with a
highlighter. That way you always know what's done and what's not. Clean
each wire lead (capacitors, resistors, chokes, crystals etc.) with a small
piece of steel wool before soldering. Parts that have been laying around
for a while can build up a layer of oxidation and be difficult to solder.
Place the component leads through the proper holes in the board and flair
them slightly so they don't fall out when you turn the board over. Use your
Radio Shack 3rd hand to hold the board while you solder the leads. Then,
before you clip the excess wire, use a high power magnifying glass to insure
the solder connection is bright and shiney. Don't build when you're tired.
And, if you get thirsty, don't drink anything alcoholic. You'd be amazed
how many wiring mistakes a single glass of beer can cause. Finally, take
short, frequent breaks during construction.

There are countless other tips and techniques but this should get you up and
running. You can do it! When you get your 40-9er on the air, let us know.

=====
Bill Jones - KD7S <><
Sanger, California
Reply to kd7s@psnw.com
=====

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Vic Simpson <vsimpson@boco.demon.co.uk>
Subject: [100] Re: Wire for dipoles
Message-ID: <gKID1HAb8yPyEwsP@boco.demon.co.uk>

In message <01BBA497.984FBC80@muenzlerk.uthscsa.edu>, Kevin Muenzler
<muenzlerk@uthscsa.edu> writes
>On Monday, September 16, 1996 1:05 PM, Frank G3YCC[SMTP:g3ycc@enterprise.net]
>wrote:
>>I am not really sure whether the diameter of the wire is of any

>>consequence at HF freq's. At UHF maybe, but IMHO the ratio of diameter to
>>freq is of no consequence at say 14mhz. Am I wrong?

>>--

>>Frank G3YCC

>>Ham Radio QRP Web Page:

>><http://homepages.enterprise.net/g3ycc/>

>

>

>The advantage of large diameter wire is mechanical strength.

>The main disadvantage is weight. Other than that, at HF there

>is no difference until you get into very small diameter wire

>where current becomes significant at higher powers.

>

>Kevin, WB5RUE

>

>

If I remember aright, the antenna length correction factor varies
according to the ratio of element length to diameter. The effect is
small enough, the range being 94% to 98% over a length :dia ratio from
around 10:1 to 10000:1. Not exactly dramatic.

--

Vic G0BVZ QRP-L #666

From owner-qrp-l@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>

Subject: [107] Re: Wire for dipoles

Message-ID: <Pine.SOL.3.94.960918074837.25980D-100000@utkux4.utcc.utk.edu>

On Wed, 18 Sep 1996, Vic Simpson wrote:

> If I remember aright, the antenna length correction factor varies

> according to the ratio of element length to diameter. The effect is

> small enough, the range being 94% to 98% over a length :dia ratio from

> around 10:1 to 10000:1. Not exactly dramatic.

> --

> Vic G0BVZ QRP-L #666

Although there are charts in various publications to give you an idea of
the length variation, there is also in the HAMCALC collection a program
that will give you values of K (as the shortening factor is sometimes
called) that agree with NEC-2 calculations for most common wire sizes and
for most common aluminum tubing sizes used in HF ham antennas. It will
even sort out the shortening due to end effect from the shortening due to
the material chosen (although the latter effect is quite small). However,
insulation shortening (antenna velocity factor) is not covered. Also see
QEX for March, 96.

LB, W4RNL

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: "Frank G3YCC" <g3ycc@enterprise.net>
Subject: [125] Re: Wire for dipoles
Message-ID: <199609181703.SAA19585@mail.enterprise.net>

Thanks Kevin. Thought I was right :>) but am always open to learn! I think there is a lot of hog-wash written and spoken about 'the best wire'. Almost anything strong enough will do, in my experience. I have used wire ex-transformers, plain copper, covered wire (PVC etc) and can not notice any difference in performance, not at HF. But, if someone must spend loads on some fancy wire...!

--

Frank G3YCC
Ham Radio QRP Web Page:
<http://homepages.enterprise.net/g3ycc/>

> From: Kevin Muenzler <muenzlerk@uthscsa.edu>
> To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
> Subject: RE: Wire for dipoles
> Date: 17 September 1996 18:56
>
> On Monday, September 16, 1996 1:05 PM, Frank
G3YCC[SMTP:g3ycc@enterprise.net] wrote:
> >I am not really sure whether the diameter of the wire is of any
> >consequence at HF freq's. At UHF maybe, but IMHO the ratio of diameter
to
> >freq is of no consequence at say 14mhz. Am I wrong?
> >--
> >Frank G3YCC
> >Ham Radio QRP Web Page:
> ><http://homepages.enterprise.net/g3ycc/>
>
>
> The advantage of large diameter wire is mechanical strength.
> The main disadvantage is weight. Other than that, at HF there
> is no difference until you get into very small diameter wire
> where current becomes significant at higher powers.
>
> Kevin, WB5RUE
>

>

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Craig LaBarge <74740.3166@compuserve.com>
Subject: [136] Re: Wire for dipoles
Message-ID: <960918220000_74740.3166_EHB232-1@CompuServe.COM>

Frank G3YCC wrote:

> I am not really sure whether the diameter of the wire is of any
> consequence at HF freq's. At UHF maybe, but IMHO the ratio of diameter to
> freq is of no consequence at say 14mhz. Am I wrong?

You're right. Years ago, when I used to do EMI measurements on equipment for a living, one of the antennas we used was a "broadband dipole" in the 30-300 MHz range. The dipole elements were made from 1" or 1.5" aluminum tubing. I don't recall the specifics of the equation, but the bandwidth improvement is some function of element diameter over length. So, in the HF range, you would need really thick elements in order to see some real broad-bandedness from a full-size dipole. In practice, with the normal range of wire guages we use for dipoles, I don't believe the thickness makes a difference in terms of bandwidth.

73, Craig WB3GCK

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Dale LeDoux <dledoux@laci.net>
Subject: [137] Re: Wire for dipoles
Message-ID: <1.5.4.16.19960918170540.2407334e@laci.net>

At 19:05 9/16/96 +0100, you wrote:

>I am not really sure whether the diameter of the wire is of any
>consequence at HF freq's. At UHF maybe, but IMHO the ratio of diameter to
>freq is of no consequence at say 14mhz. Am I wrong?

>--

>Frank G3YCC

>Ham Radio QRP Web Page:

><http://homepages.enterprise.net/g3ycc/>

>

Frank--

As usual, you're right. Diameter would have to be significant portion of the wavelength, as I understand it, to affect bandwidth. At 20 meters, even the stuff we use on high voltage transmission lines would be only a portion

of a percent. Just the sight of such substantial hardware in the air for your operation might add a few dB to the 'boast level', but would probably not significantly affect real operation. Of course, an antenna made out of 4/0 wire would not be cause for worry during the occasional ice storm, assuming one had sufficient towerage (is that a word?) on which to hang it...

72--

Dale LeDoux
Bath Electrical Systems
Power Specialists -- 480 V to 230 KV
KD5QI

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996
From: Robert Paschal <r-paschal@worldnet.att.net>
Subject: [153] Re: Wire for dipoles
Message-ID: <19960919031459.AAA21013@LOCALNAME>

At 10:00 PM 9/18/96 +0000, you wrote:

Been following this thread for awhile. I claim no expertise but do note that the 1995 ARRL Amateur Handbook page 20.2 briefly and generally touches on the relationship of conductor size to wavelength and the sharpness of the resonance curve - with a chart included. I haven't tackled the math or checked on wire diameters but I expect that if someone does they will find that as long as we are dealing with HF and wire conductors the difference will be small if not negligible. Or have I misunderstood the question?? I often do.

Bob AA0MC
>Frank G3YCC wrote:
>

>> I am not really sure whether the diameter of the wire is of any
>> consequence at HF freq's. At UHF maybe, but IMHO the ratio of diameter to
>> freq is of no consequence at say 14mhz. Am I wrong?

>

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>living, one of the antennas we used was a "broadband dipole" in the 30-300 MHz
>range. The dipole elements were made from 1" or 1.5" aluminum tubing. I don't
>recall the specifics of the equation, but the bandwidth improvement is some
>function of element diameter over length. So, in the HF range, you would need
>really thick elements in order to see some real broad-bandedness from a

>full-size dipole. In practice, with the normal range of wire guages we use for
>dipoles, I don't believe the thickness makes a difference in terms of
bandwidth.

>

>

>73, Craig WB3GCK

>

>

>

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: "Claton Cadmus" <aplitech@spacestar.com>

Subject: [143] Re: Wizard Needed!

Message-ID: <199609190107.UAA03490@Spacestar.Net>

> Hi Gang.

>

> I loaned out my MFJ 948 (theoretically 300 watt) cross needle match
> box. The Loanee flashed it over, (not real hard to do) bought and
> installed a new switch and returned the unit to me still not working,
and

> with the calibration pots all wound up. I cleaned up a shorted coil and
a

> blown diode (seen this movie before!) and calibrated the forward power
on

> both scales. That was easy.

>

> Now how the devil do you calibrate the reflected power? Preferably
> without frying the finals in my QRP rig.

I can't speak to your MFJ 948 directly as I don't have the circuit diagram
in front of me. However, most SWR meters are calibrated for reverse power
by hooking them up backwards and using the transmitter forward power to
calibrate the reverse power scale.

Hope this Helps

73 de Cla KA0GKC

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: okasb@rex.mtv.gtegsc.com (Bob Okas)

Subject: [144] Re: Wizard Needed!

Message-ID: <9609190109.AA04493@rex.mtv.gtegsc.com>

Ken,

No wizard required here! I don't have that particular ATU, but that doesn't prevent me from conjecturing! If you can switch out the tuner portion, but keep the meters in line, just swap the transmitter and antenna connections. Attach a dummy load to the transmitter port and the rig to the antenna port. Adjust the reverse power calibration pots just like you did the forward ones!

Bob - N3MBY/6

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: JEVERHART@cayman.vf.mmc.com

Subject: [126] RE: WWV URL

Message-ID: <960918131859.20203ced@carib.vf.mmc.com>

Wes, try the following web page:

<http://tycho.usno.navy.mil/what.html>

I have it up and running now.

72/73,

Joe E., N2CX

From owner-qrp-1@Lehigh.EDU Wed Sep 18 23:12:15 1996

From: Dan Keen <70731.722@CompuServe.COM>

Subject: [155] Re: [Fwd: Re: under-driv

Message-ID: <960919035320_70731.722_EHM77-1@CompuServe.COM>

> The topic of under-driving etc reminds me of the daze before qrp.
> I used to have an EIMAC antenna. It was a single 4-1000A run at a plate
> voltage of 5kv. It worked well if you supplied the right drive level. On
> receive it didn't work too well so I bypassed it and just used my 1/4 wave
> vertical. :-)
>

He He. Great message!

Dan

70731.722@compuserve.com